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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Cheon et al
Applicant's Ref: 60034-301901

Serial No.: 09/991,464

Filed: November 21, 2001

Title: METHOD FOR SYNTHESIS OF CORE-SHELL TYPE AND SOLID SOLUTION ALLOY TYPE METALLIC NANOPARTICLES VIA TRANSMETALATION REACTIONS AND APPLICATIONS OF SAME

Examiner: Unassigned

Group Art Unit: 1773

Date: January 24, 2002

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231 on January 25, 2002.

Signed: Cheryl Rogers
Cheryl Rogers

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents

Washington, D.C. 20231

Dear Sir:

Preliminarily, kindly amend the application as follows.

In the Specification

Please amend the specification as follows. A marked up version of the specification showing the changes made is attached to this communication at Appendix A.

REMARKS

The abstract was amended so that it would not exceed 150 words. No new matter is introduced by this amendment herein, and entry thereof is requested. Claims 1-23 remain pending in this application.

If the Examiner believes that a conference would be of value in expediting the prosecution of this application, he is cordially invited to telephone the undersigned counsel at the number set out below.

Respectfully submitted,

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APPENDIX A – VERSION WITH MARKINGS TO SHOW CHANGES (SPECIFICATION)

VERSION WITH MARKINGS
TO SHOW CHANGES (SPECIFICATION)

Please amend the ABSTRACT as follows:

Disclosed is a method for producing core-shell type metallic nanoparticles involving (i) providing a dispersion of a first metal as nanoparticles in an appropriate organic solvent; (ii) providing a solution of a metallic precursor containing a second metal in an appropriate organic solvent, in which the second metal has a reduction potential higher than that of the first metal; and (iii) combining the dispersion from (i) and the solution from (ii) together to carry out the transmetalation reaction of the first and second metals, thereby forming core-shell type metallic nanoparticles. [Also, according to a second aspect of the invention, there is disclosed a. method for producing solid solution alloy type metallic nanoparticles involving (i) providing a solution of a thermally degradable metallic precursor containing a first metal in an appropriate organic solvent; (ii) providing a solution of a metallic precursor containing a second metal in an appropriate organic solvent, in which the second metal has a reduction potential higher than that of the first metal; and (iii) combining the solutions from (i) and (ii) together to carry out the transmetalation reaction of the first and second metals, thereby forming solid solution alloy type metallic nanoparticles.]